99C-140

4.5 PSP Cover Sheet (Attach to the front of each proposal)

Proposal Title: SONOMA CREEK WATERSHED CONSERVANCY
Applicant Name: SOUTHERN SONOMA COUNTY RESOURCE CONSERVATION DIST.
Mailing Address: 1301 REDWOOD WAY SUITE 170 PETALUMA CA 94952
Telephone: 707 794-1242
Fax: 794 7902
Email: Aplomado-falcon@worldnet.att.net

Amount of funding requested: $ 702 633 for 3 years

Indicate the Topic for which you are applying (check only one box). ☑ WATERSHED CONSERVANCY ☐ MULTIPLE TOPIC AREAS)

- ☐ Fish Passage/Fish Screens
- ☑ Habitat Restoration
- ☑ Local Watershed Stewardship
- ☐ Water Quality
- ☐ Introduced Species
- ☐ Fish Management/Hatchery
- ☑ Environmental Education

Does the proposal address a specified Focused Action? ____ yes ✓ no

What county or counties is the project located in? SONOMA

Indicate the geographic area of your proposal (check only one box):

- ☐ Sacramento River Mainstem
- ☐ Sacramento Trib: ____
- ☐ San Joaquin River Mainstem
- ☐ San Joaquin Trib: ____
- ☐ Delta: ____
- ☐ East Side Trib: ____
- ☐ Suisun Marsh and Bay
- ☑ North Bay/South Bay: SAN PABLO BAY
- ☐ Landscape (entire Bay-Delta watershed)
- ☐ Other: ____

Indicate the primary species which the proposal addresses (check all that apply):

- ☐ San Joaquin and East-side Delta tributaries fall-run chinook salmon
- ☐ Winter-run chinook salmon
- ☐ Late-fall run chinook salmon
- ☐ Delta smelt
- ☐ Splittail
- ☐ Green sturgeon
- ☐ Migratory birds
- ☑ Other: CA freshwater shrimp
- ☐ Spring-run chinook salmon
- ☑ Fall-run chinook salmon
- ☐ Longfin smelt
- ☑ Steelhead trout
- ☐ Striped bass
- ☐ All chinook species
- ☐ All anadromous salmonids

Specify the ERP strategic objective and target (s) that the project addresses. Include page numbers from January 1999 version of ERP Volume I and II:
ERP Strategic Plan: reverse decline of native resident fish (p.40) restore riparian habitat (p.42), restore freshwater shrimp (p.39), reduce impacts of NPS pollution (p.45), improve habitat for neotropical migrant birds (p.40)

Title of Project: Sonoma Creek Watershed Conservancy

Contact Person

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Participants and Collaborators
Southern Sonoma County Resource Conservation District
Sonoma Ecology Center
Sonoma Valley Vintners & Growers Association
San Francisco Estuary Institute
Sonoma Creek Adopt-A-Watershed
EPA Region IX

Type of Organization: Resource Conservation District
Tax ID Number: 94-2785937

EXECUTIVE SUMMARY

The Sonoma Creek Conservancy is a partnership of local stakeholders including Southern Sonoma County Resource Conservation District (RCD), Sonoma Ecology Center (SEC), Sonoma Valley Vintners & Growers Association (SVVGA), San Francisco Estuary Institute (SFEI), and Sonoma Creek Adopt-A-Watershed (SCAAW). This collaborative alliance of stakeholders has a proven track record of successful watershed planning and implementation work, including work funded by a previous CALFED grant. The Conservancy now proposes to implement riparian and aquatic habitat restoration activities, and to continue watershed stewardship activities and education programs in the Sonoma Creek watershed.

Sonoma Creek's watershed is a manageable scale at 170 square miles. It is close to the mouth of the San Francisco estuary, has no dams, supports a diverse native fish community, and has a high level of public awareness to support restoration projects. CALFED funding will enable the Conservancy to implement a series of restoration and enhancement actions which will directly benefit CALFED target species, including steelhead and the California freshwater shrimp. Proposed stewardship and education tasks will expand the Conservancy's existing efforts to inform and engage the public in watershed issues while providing critical data for adaptive management. These activities continue successful programs begun with CALFED funding to the Conservancy in 1998.

All proposed tasks will take place in the Sonoma Creek watershed. The project spans three Topic Areas. Project tasks are listed below with their lead agency or organization indicated (tasks may be referred to by number in the application,):

Habitat Restoration

1) Fish Passage Enhancement, Asbury Creek at Arnold Drive—SEC
2) Pool Habitat Enhancement and Restoration, Sonoma Creek and tributaries—SEC
3) Bank Erosion Repair and Riparian Restoration, Carriger Creek at Arnold Drive—RCD
4) Bank Stabilization, Nathanson Creek—RCD

Local Watershed Stewardship

5) Vineyard Demonstration Projects—SVVGA
6) Expand Sonoma Valley Stream Stewards Program—SEC
   a) Continuing Analysis of Factors Limiting Steelhead
   b) Produce Watershed Map Through Volunteer Watershed Assessment
   c) Monitor Conservancy Projects

Environmental Education

7) Workshops for Local Government Staff on Using Existing Regulations to Preserve and Enhance Watershed Health—SEC
8) Education Coordination for Watershed Studies—SCAAW
9) Publication of Anecdotal Ecological History of Sonoma Valley—SEC

Project Management

10) Watershed Coordinator—RCD
11) Grant Administration and Project Management—RCD

The existing RCD Watershed Coordinator will manage projects and programs under this proposal and oversee Conservancy partners. The Coordinator will report directly to the RCD Board of Directors.

Conservancy partners will meet bi-monthly to discuss projects. The proposed tasks will be accomplished over a period of one to three years. Restoration projects are ready to begin immediately following a signed contract with CALFED.

This CALFED request is for $483,923 for the first year of a 3-year $702,633 program. This cost is matched by $143,030 in local in-kind contributions.

No adverse third party impacts are expected. All tasks in this proposal include one to two years of monitoring. Qualified Conservancy partners will review monitoring and data to ensure QA/QC.

PROJECT DESCRIPTION

1. **Fish Passage Enhancement, Asbury Creek at Arnold Drive – SEC.** Funds are needed to implement a fish passage project to restore a historic steelhead migration to two miles of spawning and rearing habitat in which no steelhead have been observed since the early 1960s. SEC has collected pertinent hydraulic and hydrologic data as part of a CALFED-funded design process. Hydraulic controls will be installed within a 100 foot long concrete box culvert that currently presents a barrier to steelhead migration on Asbury Creek, a perennial tributary to Sonoma Creek. Grant funds are needed primarily for equipment and materials since local community volunteers will donate a significant portion of the implementation costs. Construction should be complete before the fall 1999 migration.

2. **Pool Habitat Enhancement and Restoration, Sonoma Creek Tributaries – SEC.** This project will design and implement site-specific restoration actions to increase the frequency and quality of pool habitat for steelhead trout and freshwater shrimp. The restoration design will emulate natural channel hydraulic processes whereby large woody debris (LWD) provide opportunities for scour to create and maintain pools. LWD placement will also provide hydraulic diversity and cover, to improve juvenile fish habitat rearing conditions. Tasks will be supervised and conducted by a geomorphologist and riparian specialist or fisheries biologist, with assistance from interns and Stream Stewards.

LWD Inventory - Approximately 30 miles of Sonoma Creek and its tributaries will be surveyed following DFG methodology to quantify the amount, distribution, and functional characteristics of LWD and estimate LWD recruitment potential. Stream reaches will be morphologically classified based on a Rosgen (1996) Level II inventory to aid selection of candidate sites for pool restoration.

Select Sites for Restoration/Enhancement - Sites best suited to provide steelhead rearing habitat and geomorphically suitable for restoration will be identified. Sites will be screened and ranked based on access, landowner interest and biological suitability.

Design - Restoration measures will provide stable LWD or boulder placements in appropriate configurations to scour and maintain pools. Stabilizing actions will likely include keying LWD members into streambanks. Restoration measures will consider critical design parameters including LWD length and diameter size, channel hydraulic geometry, hydrologic conditions and placement relative to the channel geomorphic characteristics at each site. Cross-section and longitudinal surveys of the channel will be conducted at each site to depict channel conditions and assist with design. Opportunities to provide habitat for California freshwater shrimp will be targeted for lower gradient reaches.

Implementation - Pool restoration and enhancement designs will be implemented at 12 selected locations. This task will involve developing a materials and equipment list, purchasing or renting needed equipment and materials, obtaining permits, and actual installation.

Deliverables – (1) LWD Inventory Report, (2) Restoration/enhancement design descriptions and drawings, (3) Post-construction report with site photographs and (4) final report providing results, cross-section surveys, photographs, and fish utilization.

3. Riparian Corridor Restoration, Carriger Creek – RCD. This project will stabilize an eroding streambank using structural and biotechnical stabilization methods on 800 feet of Carriger Creek to restore habitat for steelhead, neotropical migrant songbirds. Native vegetation will be planted to provide further stabilization and increase canopy. The high visibility of this site from Arnold Drive, and its current tree-less condition, makes this an excellent demonstration site for proper riparian corridor enhancement.

4. Bank Erosion Repair/Stabilization, Nathanson Creek – RCD. Nathanson Creek northwest of the City of Sonoma is a perennial creek that provides habitat for salmonids and neotropical songbirds. One bank is eroding, threatening trees that provide shelter and shade. This project will stabilize the bank using biotechnical structures and revegetation with local native plants.

5. Vineyard Demonstration Projects—SVVGA. The SVVGA will work with willing vineyard owners to design, implement and promote environmentally responsible vineyard Best Management Practices (BMPs). We will focus on environmental benefits for water quality, endangered species habitat and other wildlife. Improvements may include setbacks from riparian areas; streambank stabilization; terracing; flexible pipe drop; erosion reduction through use of cover crops, vegetated and rock lined drainage ditches; improved chemical application methods; Integrated Pest Management; and native riparian plantings. These actions will reduce sediment and chemical transfer, reduce water temperatures, provide protective cover for aquatic life forms, and reduce riparian erosion. Participating farms will present results and conduct demonstration events for the industry and to the public.

6. Expand Stream Stewards Volunteer Monitoring Program—SEC. SEC started the Sonoma Valley Watershed Station (SVWS) in June 1998 with funding from the 1998 CALFED grant. Accomplishments to date include the establishment of a citizen "Stream Stewards" program, establishment of an internship program with Sonoma State University, analysis of stream temperature and assessment of spawning gravel quality to identify limiting factors for steelhead. Volunteer programs will be expanded and overseen by a Technical Coordinator and Volunteer Coordinator. SVWS staff will develop quality assurance and training procedures with review by qualified professionals and EPA approval. The Volunteer Coordinator will schedule volunteers for all Conservancy projects.

Continuing Analysis of Factors Limiting Steelhead: Stream Stewards will be trained to use standard water quality testing kits following state-approved Coyote Creek Riparian Station (CCRS) protocols. Water quality monitoring will examine possible limiting factors such as temperature, DO, pH, sediment, nutrients, fecal coliform, and possibly pesticides (with volunteer assistance from certified laboratories). Stream Stewards will also be trained in the DFG Stream Bioassessment Procedure, developed from EPA guidelines, with the intent of participating in CMARP. Benthic macroinvertebrates (BMIs), a major food source for steelhead, may also be limiting. BMIs will be counted and identified to family level and data analyzed to draw conclusions about the biological health of the sampled site.

Watershed Assessment and Map: A preliminary land use assessment for the watershed will be generated via photo-interpretation of USGS Digital Ortho Quarter Quads and 5 m satellite imagery. Volunteers will field check preliminary maps. The assessment will follow EPA protocols and the SFEI Watershed Science Plan. Spatial extent of riparian areas will be delineated and land uses identified. This information will be used to develop a watershed map with information on land use, riparian zone width, stream hydrology and geomorphology.

Monitoring Conservancy Projects: Stream Stewards will assist with the pre- and post-project monitoring for all Conservancy projects with assistance from professionals.

7. Workshops on Watershed-Related Regulations for Public Employees – SEC. Local public employees need to make informed decisions on issues that affect watershed health. The SEC will design and present workshops for local public employees on existing regulations that protect riparian and aquatic habitat. These include stream setbacks, erosion and pollution controls and practices that minimize common ecological problems arising from dominant land

uses (e.g., vineyard, residential, dairy). We will review local zoning ordinances, general plans, state and federal regulations and other government documents relevant to land use. The workshops will convey the biological or geophysical basis for existing regulations and communicate the intent of the regulations beyond the letter of the law. We will present at least two workshops, one each for the city and county of Sonoma. The text and graphics of the workshops will be made available on SEC's web site and to interested parties.

8. Education Coordination for Watershed Studies – SCAAW. SCAAW is a community-based non-profit which assists educators in implementing the Adopt-a-Watershed curriculum, an award winning, sequential K-12 science curriculum that emphasizes hands-on activities in the local watershed. Students learn to understand the long-term changes in their environment by participating in projects which use the same sites each year. The students' participation in restoration projects and community actions teach students the value of their local environment. SCAAW will expand environmental education efforts in Sonoma Valley Unified School District's elementary schools and launch the "Fish in Schools" program district-wide. In expanding the elementary school program, we will introduce and discuss fish, streams, habitat, bugs and eventually the entire watershed, to ensure students understand concepts that are requisite to studying fish in great detail in fifth grade. We will provide training, in-class support, field trip assistance, curricula and essential lab materials so that the elementary schools can teach focused, sequential science and prepare students to participate in the "Fish in Schools" program.

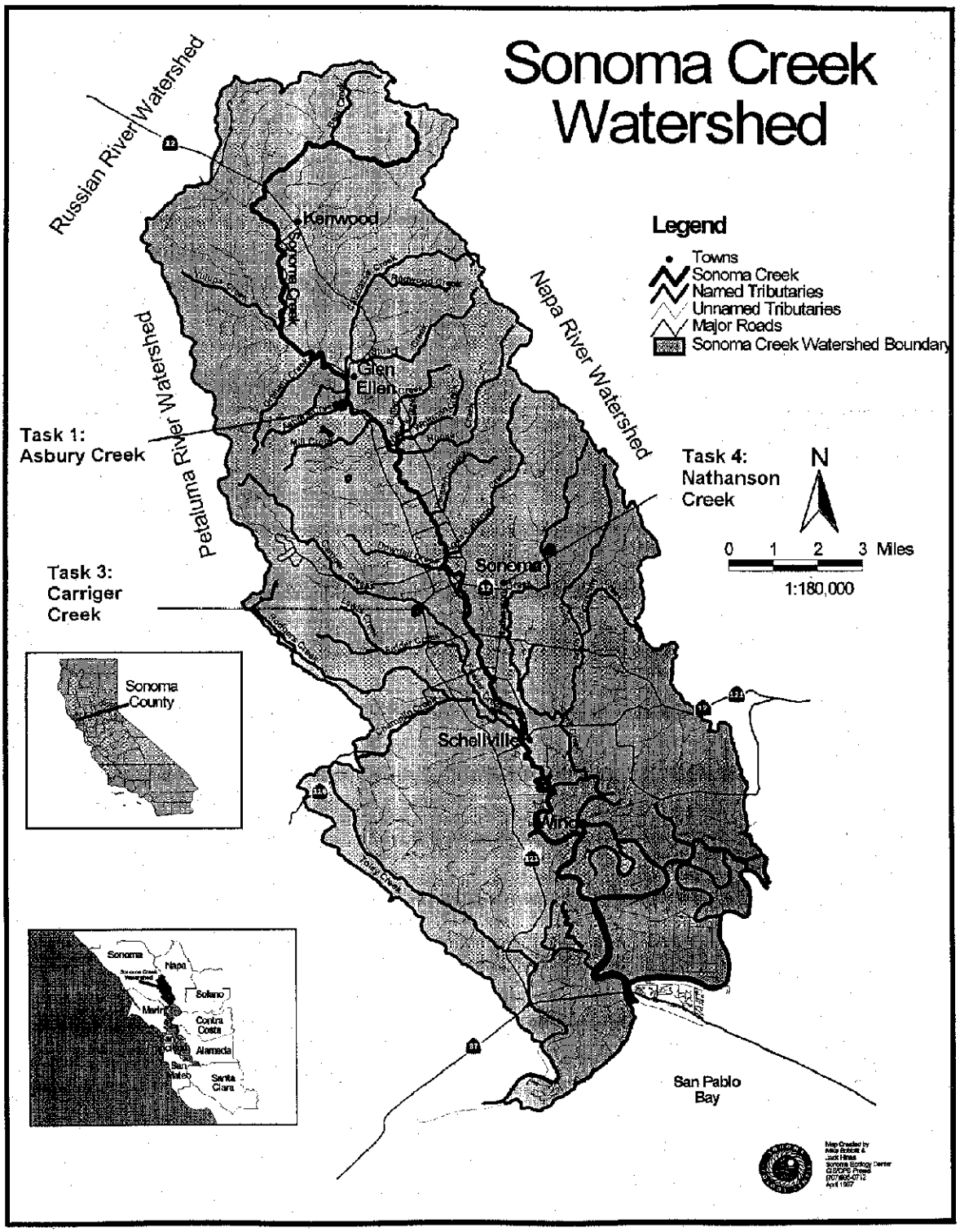
9. Publication of Anecdotal Ecological History. Current information about Sonoma Valley before European settlement does not provide a complete understanding of the ecological capacity of the watershed. We particularly need information on specific questions of stream hydrology, riparian forest extent, and fisheries. Beginning at our upcoming Creek Day event, we will collect oral ecological histories from long-time creek residents. We will publicize the data in local newspapers, produce a document that can be used by the public and educators and communicate findings about sensitive species and habitats to local, state and federal agencies as appropriate. Data on the native species and habitats that the watershed once supported will provide guidance for watershed management, particularly since Sonoma Creek has an unregulated streamflow.

10. Watershed Coordinator – RCD. The watershed coordinator provides adaptive management, continuity and program oversight of all watershed restoration and assessment projects; coordinates and facilitates bi-monthly meetings of Conservancy partners to review project data and progress reports; continues outreach and education efforts; and produces a watershed newsletter.

11. Project Management – RCD. Project management involves handling service contracts, grant administration for the Watershed Conservancy, quarterly reports and a final report. All tasks are ready to begin as soon as funding is secured.

Location and Geographic Boundaries of the Project

Sonoma County, Sonoma Creek watershed (see map), California Hydrologic Map Unit Number 206.40. Only Tasks 1 (38.36N, 122.52W), 3 (38° 17' 30" N 122° 25' 00" W), and 4 (38° 17' 30" N, 122° 30' 00" W) are site-specific.



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ECOLOGICAL/BIOLOGICAL BENEFITS

(Unless otherwise noted, page number references are to the ERP, Vol. II)

Primary ecological/biological objectives:

1. Protect, restore and enhance riparian and shaded riverine aquatic habitat in Sonoma Creek watershed to improve water quality; fish, freshwater shrimp, and riparian species habitat; and fresh water inflow to San Pablo Bay.
2. Foster recovery of at-risk native species.
3. Ongoing implementation of habitat improvements in the Sonoma Creek Watershed Enhancement Plan.
4. Increase public understanding of natural resource conditions and needs.
5. Include diverse elements of the community in the management of the watershed.
6. Continue watershed assessment to provide a scientific foundation for management and restoration.

Target stressors, species and habitats: *Stressors*: fish migration barriers, channel form changes, loss of existing riparian zone, low water quality (p. 120), land use practices (p. 126). *Habitats*: riparian corridors and aquatic habitats. *Primary species*: Steelhead Trout, possibly Chinook Salmon (presence is uncertain), California Freshwater Shrimp, Red-legged Frog. *Other species*: native anuran amphibians, Western Pond Turtle, Tiger Salamander, Swainson's Hawk (p. 128), Yellow Warbler, and other neotropical migratory birds that use riparian corridors.

Project Need: 1) If the San Pablo Bay's role as nursery and feeding ground is to be maximized, habitat and water quality conditions in the San Pablo Bay watershed must be maintained and improved (p. 142). 2) Sonoma Creek is relatively healthy. In the whole CALFED area, Sonoma Creek is one of the most cost-effective areas in which to invest restoration (Rob Leidy, see support letter). 3) The Sonoma Creek watershed is impaired for sediment and nutrient loading (State Water Resources Control Board's Impaired Waterbodies 303(d) list). 4) Education of the general public and local government staff if day-to-day decisions are to benefit watershed health. 5) Land use practices must be addressed if a healthy economy and environment are to co-exist. 6) Progress toward achieving water quality, habitat restoration, and steelhead viability must be measured against some baseline condition. Data required for such a baseline condition assessment are limited.

Primary benefits within the Sonoma Creek watershed relate to habitat restoration (enhanced instream and shaded riverine aquatic habitat from reduced sedimentation, improved land management practices, protection of stream setbacks, revegetation of riparian corridors with native species), watershed stewardship (increased knowledge of watershed conditions, especially those affecting Steelhead and Freshwater Shrimp), and education (increased awareness on the part of landowners, local governments, and other public). Expected benefits to San Pablo Bay and CALFED watershed: a more natural sediment and water supply, increased delivery of nutrients to fish and the aquatic foodweb (p. 127). There does not appear to be a method to quantify the benefits of a multi-part watershed enhancement approach.

Secondary benefits: Rehabilitate natural capacity and functional connectivity of riparian and aquatic environments in the watershed. Continue developing a quantitative basis for assessing significant impacts of stressors and prioritizing restoration actions. reversing downward population trends of native riparian and aquatic species that are not yet listed. Enforcement of stream setbacks, which will favor native members of aquatic and related terrestrial communities, prevent establishment of non-native species, reduce impacts of non-natives, improve and maintain water and sediment quality. resolve conflicts between water mgt/land use and listed species. Improve the recreation steelhead fishery.

Benefits to Third Parties: Benefits to downstream users include reduced sedimentation and pollution, improved water quality and reduced risk of flooding.

Basis for Benefits:

Benefits to San Pablo Bay and CALFED watershed: The health of the North Bay affects the health of

Sacramento/San Joaquin watersheds and their salmonid populations (p. 142). All Central Valley anadromous fish pass through the North Bay and rely on it for some stage of their lives. Ecological factors having the greatest influence on North Bay and marsh fish and wildlife include freshwater inflow from rivers, wetlands, riparian vegetation, and aquatic habitat diversity (p.120). Directing resources to relatively healthy watersheds, particularly those in the North Bay, is a highly efficient way to leverage limited funding for maximum benefit to the entire CALFED area (Robert Leidy, EPA, speech at 1999 State of the Estuary Conference, San Francisco).

Benefits to Sonoma Creek watershed: Riparian habitat and SRA habitat, and connectivity of those habitats, are of key functional importance for populations of species of concern; this region has a history of loss of these habitats (pp. 124, 131, 135). The major factor limiting steelhead populations in [San Pablo Bay] streams is agricultural development including water diversion, barriers due to diversion dams, high water temperatures and other water quality impacts from urban and agricultural runoff (p. 126). It follows that working with growers to improve land use practices, and repairing damage done to streams by past practices, will be beneficial. Steelhead will benefit from improved streamflows and riparian and shaded riverine aquatic habitat (p. 136). BMIs are good indicators of stream quality because they are affected by the physical, chemical, and biological conditions of the stream and are extremely sensitive to pollution. They are a critical part of the aquatic food web. Changes in their abundance and variety may show the impacts from habitat loss not detected by traditional water quality assessments (FR Hauer and GA Lamberti. 1996. Methods in Stream Ecology. Academic Press. London.)

The 1997 Sonoma Creek Watershed Enhancement Plan (SSCRCD, 1997), which included habitat typing by DFG, and stream surveys conducted by SEC, found that pool habitat is lacking in the watershed and may therefore be limiting the steelhead fishery and freshwater shrimp. Reasons for this lack include loss of large woody debris (LWD) in many channel reaches due to flood protection actions, private timber harvesting, and conversion of riparian forest to agricultural and grazing purposes.

Scientific hypothesis/question to be evaluated: All the proposed tasks relate to one general hypothesis; that to improve general watershed health, both in Sonoma Creek and the CALFED area, we must remove identified stressors, restore and maintain key habitat types, and educate the community about the current status of the watershed and how they can help. Monitoring for each task is designed to ascertain answers to sub-hypotheses. Sub-hypotheses, by task: 1) Steelhead would swim up Asbury to spawn if they could traverse the culvert under Arnold Drive. 2) Providing more and better pools will increase steelhead populations. 3), 4) Stabilizing and vegetating streambanks will improve fish and wildlife habitat. 5) (dependent on individual action) 6a) water quality or food supply are limiting steelhead populations, 6b) a volunteer program can provide useful valid watershed data and expand awareness of watershed issues in the general public, 7) workshops will improve awareness of existing environmental laws and regulations among city and county staff, 8) elementary school students will learn about watershed issues, 9) anecdotal historical information will shed uniquely useful light on the pre-disturbance capacity of the watershed.

Self-sustainability of project: Essentially this funding request is for support of a successful, established collaboration. The Conservancy partners have long-term stakes in improving the watershed, and this commitment assures the continuity of the tasks begun by this proposal. Restoration projects will utilize proven bio-technical designs and native materials where possible. Watershed assessment and monitoring projects will provide baseline data on which scientifically based decisions can be made in the future.

Ecosystem Approach: The Conservancy assures a broad-based, thoroughly informed, ecosystem approach to watershed management through joint meetings with its diverse partners, technical advisors, and agency personnel, through continual information gathering from conferences, literature, and organizations in other watershed..

Adaptive Management: Conservancy priorities and conclusions about the watershed are highly

responsive to new information. For example, SEC started the Sonoma Valley Watershed Station (SVWS) in June 1998 with funding from the 1998 CALFED grant. One of its tasks was to employ volunteer "Stream Stewards" to analyse stream temperature and spawning gravel quality as possible limiting factors for steelhead. These studies indicate that water temperature and spawning gravel availability are likely not limiting factors. In response to these findings, we now propose to monitor two other possible limiting factors: water quality and BMI.

Linkages

SWRCB funded the Sonoma Creek Watershed Enhancement Plan (SSCRCD, 1997) to address resource needs in this watershed. CALFED funding will maintain continuity with the Sonoma Creek Watershed Enhancement Plan and expedite implementation of enhancement recommendations. The SSCRCD and SVVGA have completed more than $100,000 in Vineyard Demonstration projects to date. Growers' responses to last year's Demonstration Projects task were enthusiastic; therefore this year's task is a continuation of last year's proposal.

A 1998 CALFED grant provided partial funding for a Sonoma Valley Watershed Station (SVWS). The SVWS is an education and research center established to collect baseline data on the watershed, provide a technical and educational resource to the community, and train Stream Stewards to evaluate watershed characteristics. Through the Stream Stewards program, SVWS activities encourage a sense of responsibility for the watershed, leading to protection and enhancement of existing habitat for steelhead trout and California freshwater shrimp. Successful projects have included a Watershed Stewardship program, training and educating 25 Stream Stewards to monitor stream processes, invasive plant removal (*Arundo Donax*) along streambanks, watershed education outreach, and two scientific studies focusing on summer temperatures and spawning habitat quality to analyze of factors limiting steelhead.

The pool habitat enhancement and restoration project (Task 2) addresses problems identified in previous watershed assessment studies conducted by the RCD (1997) with assistance from DFG. This and the other habitat restoration projects work toward the ERP and CALFED goals of improving aquatic habitat, support and recovery of native species, protection and restoration of functional habitat types, and improved water quality.

Conservancy partners have close ties to other north bay and regional watershed groups such as Napa RCD, Marin county groups, RCD activities in the Petaluma Valley, and the CALFED BDAC Watershed Workgroup.

Compatibility with Non-Ecosystem Objectives:

This proposal contains no conflicts with non-Ecosystem objectives. SEC, a Conservancy partner, has been actively and continuously involved in creating the CALFED Watershed Program, as part of the Watershed Workgroup. The Conservancy's approach directly reflects the approach outlined by the Watershed Program. This proposal also complements Water Quality Program goals by improving the quality of inflows to San Pablo Bay, benefiting all organisms living in and passing through the North Bay. It addresses water quality concerns at their source (ERP p.18 Vol I).

TECHNICAL FEASIBILITY AND TIMING

Technical professionals inside and outside the Conservancy have been engaged with the ecological issues facing the Sonoma Creek watershed for years. This long term information base, plus the input of experts, assures the fundamental soundness of the Conservancy's approach. Specifically, we have had guidance from Paul Jones and Rob Leidy at the EPA Region IX, Bill Hurley from the Regional Water Quality Control Board, Bill Cox of the California Department of Fish and Game in Yountville, and Mike Rigney, formerly of the Coyote Creek Riparian Station. Personnel at the SSCRCD, SEC and SVVGA are experienced with approaches and techniques needed for the construction and monitoring proposed in Tasks 1-5. The education-related tasks, likewise, will be carried out by experienced personnel using established protocols.

Given the importance of maintaining the health of Sonoma Creek and other San Pablo Bay streams, the alternative to the technically based, grass roots approach taken by the Conservancy would be directed, coordinated management actions by local and state agencies. The Conservancy, with its established public support, can accomplish the same work at lower cost. Since the Conservancy already has broad-based public buy-in, its work is well-received and maintained by the community. Alternatives for watershed restoration were discussed and evaluated thoroughly during the development of the Sonoma Creek Watershed Enhancement Plan, both in SEC TAC meetings and at Watershed Conservancy meetings.

Alternatives: If the Asbury Creek culvert is not made passable (Task 1), the alternatives for getting steelhead into the stream would be completely rebuilding the culvert or stocking the stream above the culvert. If the effort is not made now to replenish LWD and restore pool habitat for juvenile steelhead and freshwater shrimp (Task 2), the alternative would be to create artificial, expensive instream structures that may not exactly emulate the natural processes that once occurred in the streams. Similarly, the alternatives to biotechnical and vegetative bank stabilization provide no habitat value for aquatic or riparian species.

The alternative to a broad-based environmental education effort is having citizens who are uninformed and disconnected from watershed processes. Problems would escalate before being noticed and before preventive action could be taken, leading to costly "quick fixes" which may not be ecologically sound and which may destroy habitat instead of protecting it.

Limiting factors for steelhead should be researched now so measures can be taken to restore the population before we have to resort to hatchery-raised fish to stock our streams.

Permitting and access: All restoration projects require permits from California Department of Fish and Game (CDFG). Task 1 may also require permits from Sonoma County Water Agency or the Department of Public Works. RCD projects may also require concurrence from Army Corps of Engineers. Once potential restoration sites are identified for Task 2, permission will need to be obtained from landowners before any work can begin.

All restoration projects have had preliminary review by applicable permitting agencies. There are no obstacles foreseen that will hinder implementation of any element of this proposal. These projects have had site analysis and preliminary design review and are ready for funding. Several landowners have already expressed an interest in supporting the Conservancy efforts.

Other issues: Sources and handling of LWD (Task 2) have not been finalized. If none is readily available for placement in the stream, LWD will need to be found elsewhere and brought in by truck. This could delay the restoration process somewhat. For the Stream Stewards program (Task 6), the number of samples to be collected will be determined as part of the planning stage for the studies. Number of samples and the timing of the program will depend on volunteer recruitment, cost and availability of trainers, weather conditions, and funding.

Timeline

A. Scheduled Milestones	Oct-99	Nov-99	Dec-99	Jan-00	Feb-00	Mar-00	Apr-00	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00
Habitat Restoration													
Task 1 Asbury Creek Fish Passage	permitting										start const		
Task 2 Pool Habitat Enhancement & Restoration	inventory		select candidate sites	design	landowner outreach		implementation						monitoring ongoing
Task 3 Carriger Creek Restoration	site review	develop plan				receive permits			start const				Task complete
Task 4 Nathanson Creek Bank Stabilization	site review	develop plan							start const				Task complete
Task 5 Vineyard Demonstration Projects	develop & distribute RFP	review sites & BMPs	select projects						start const				Task complete
Local Watershed Stewardship													
Task 6 Expand Stream Stewards Program	Limiting factors, protocols, QAPP, data equis				Set up trainings, Field check data	Training		Collect data			Compile data	Draft reports, maps	Annual Report
Environmental Education													
Task 7 Watershed Health Workshops	Produce materials	Set up workshops		Conduct workshops								Report	Task complete
Task 8 A-A-W Watershed Education	teacher training	teacher training				teacher training	teacher training						Ongoing
Task 9 Publish Ecological History of Sonoma Valley	Develop interviews		Conduct interviews					Compile interview data		Draft report			Task complete
Task 10 Watershed Coordinator	conduct outreach	SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting		SCWC meeting	
Project Management													
Task 11 Administration				quarterly report			quarterly report			quarterly report			quarterly report

MONITORING AND DATA COLLECTION METHODOLOGY

Monitoring is an integral part of all projects in this proposal. Monitoring will be performed by trained volunteers, as part of the SWVS Stream Stewards Program, as well as professional staff of the SSCRCD and SEC. Data collection protocols, QAPPs, data analysis, and draft reports will all be reviewed by TAC members as well as other qualified professionals with ties to the Conservancy, and by the appropriate agency (i.e., EPA, CDFG). Sampling locations will be chosen by a panel of watershed stakeholders and will be based on water resource interest, access, and proximity to areas of known natural and human-induced disturbances. Data will be evaluated in conjunction with publications about similar projects and appropriate agency guidelines to determine how to interpret the results. The qualitative and quantitative habitat assessment data will be placed into a database and spatially referenced so it can be integrated with GIS data previously compiled by the SEC. This database is being set up for public access. All data, results and interpretation will be disseminated by final or yearly report to interested parties, and will be made available on the internet when possible and appropriate.

Monitoring activites are summarized in the table below. The numbered objectives refer to the objectives identified in the Ecological/Biological Benefits section. Project tasks address multiple objectives, as shown in the table. Also, see timeline for monitoring tasks.

Data evaluation approach:

Data evaluation will be conducted routinely by members of a technical advisory committee (TAC) of local volunteer scientists and technical professionals, and published annually for public review through presentation at an annual watershed education event put on by Conservancy partners called "Creek Day". QA/QC and further evaluation will be assisted by scientists at SFEI and local universities with existing relationships to the project partners (Sonoma State University, UC Davis, Santa Rosa Junior College).

Data synthesis and analysis will be compatible with governmental agency requirements, and year-end reports will be produced and distributed to interested parties. The SEC's TAC and associates will review the QAPP, project design, data analysis and reports before a final version is approved. Data will be used to direct restoration and rehabilitation efforts, and to educate community members about their watershed and impacts they have upon it.

Monitoring and Data Collection Information

Objectives	Hypotheses to be tested (and relevant tasks)	Parameters and data collection	Evaluation Approach
1, 3, 4	Improving fish passage will give steelhead access to habitat; habitat will be utilized (Task 1)	Electrofishing, visual observations of spawning activity	Compare fish utilization and spawning before and after implementation
1, 3, 4	The watershed is lacking natural steelhead habitat created by the presence of LWD creating scour pools (Task 2)	Cross-sectional surveys, photo-documentation, fish utilization surveys at selected sites (with snorkeling or electrofishing), monitor reference pool sites	Compare fish utilization before and after pool enhancement, compare to reference sites
1, 3	Habitat for steelhead and other native species can be restored and erosion improved by streambank stabilization and revegetation in two demonstration projects (Tasks 3, 4)	Photo-documentation. Measure bank retreat and percent native riparian cover at major work sites before and after implementation. Document growth of riparian canopy and bank erosion rate.	Compare erosion rate to historical rate as shown by aerial photos. Compare riparian canopy to reference sites.
1, 4, 5	Vineyards can implement BMPs to reduce erosion and pollution, and improve habitat values. (Task 5)	Stream Stewards will collect water quality data around demo sites, also monitor erosion and sediment loading.	Compare water quality and erosion upstream and downstream of sites, before and after implementation.
2, 4, 6	Citizen monitors will gain a greater understanding of watershed processes while collecting valuable data to evaluate limiting factors for steelhead. (Task 6)	Use standard kits and procedures to collect data on temperature, DO, pH, nutrients, pesticides, fecal coliform, and BMI populations to determine limiting factor for steelhead.	Compare data to literature and agency guidelines for water quality and food source requirements of steelhead.
2, 4, 5	Teachers can use AAW curriculum in their classrooms to teach children about fish and watersheds. (Task 7)	Numbers of teachers trained, number of teachers using AAW curriculum in classes, participation in community projects.	Determine if numbers meet goals of trained teachers using curriculum, students prepared for Fish In Schools in 5th grade.
1, 2, 5	Public employees will learn about the importance of enforcing regulations for watershed health. (Task 8)	Questionnaire to workshop participants for feedback on workshop usefulness and effectiveness.	Feedback and level of satisfaction will guide focus of future workshops.
2, 5, 6	Long-time residents have valuable information about the historical conditions of the watershed. (Task 9)	Interview watershed residents. Collate, cross-reference information. Collect historical data from DFG and other agencies.	Compare stories with known numbers of steelhead present in streams, etc. to see if memories agree with the known historical facts

LOCAL INVOLVEMENT

This proposal continues the work of the diverse Watershed Conservancy which has local and regional support and involvement from many groups such as USDA Natural Resources Conservation Service, National Marine Fisheries Service, California Department of Fish and Game, Environmental Protection Agency, US Fish and Wildlife Service, California Farm Bureau, State Water Resources Control Board, Bouverie Audubon Preserve, California State Department of Parks, both the University of California and State Universities, as well as many local government and business groups. These include Rotary and Kiwanis Club, Sonoma Sister Cities, Sonoma Community Center, Sonoma City Hall and Planning Commission, The Boys and Girls Club of Sonoma, Sonoma Valley Regional School District, the Sonoma Chamber of Commerce and Sonoma Valley Visitors Bureau.

The tasks outlined in this proposal engenders participation through diverse community-based interests. Past efforts by the Conservancy have proved highly successful in both communicating the vision of restoration and stewardship and involving various members of the community in specific watershed projects. The SEC's Sonoma Valley Watershed Council, a forum for discussing environmental topics every two months, promotes community awareness and involvement in local issues.

Previous projects have been embraced and supported by both the local community and resource agencies. They have served to educate and involve the public, soliciting a strong and more informed segment of community support. Many agencies who in the past were either uniformed or unwilling to participate have realized the importance of watershed issues and the value of their support through the success of these former projects. The achievement gained in both the natural and human community from these past watershed projects has given a sense of credibility to the current proposal and allowed it to be strongly supported by state and regional agencies and the local community.

Strategies for distributing and publicizing both scientific reports, findings and general information about the watershed have been handled successfully in the past and will continue along the same general lines. Information is generally disseminated in the Conservancy newsletter "Creek Currents" and in the SEC newsletter. These newsletters are available to members through mailings and to non-members at community centers and places of business.

A strong liaison exits with several local newspapers who periodically publish lead stories on environmental issues. The executive director of the Sonoma Ecology Center writes a semi-weekly column on environmental issues. Various members of the Conservancy have developed oral presentations and slide shows which are offered to groups such as the Rotary Club, Chamber of Commerce and various businesses, schools and government agencies. When appropriate, news/press releases are sent out for publication. If there is a particularly significant event a press conference is held and television stations are able to broadcast the event live.

All Conservancy work is done with the consent of willing landowners. Partners have invested thought and effort into developing respectful yet reasonably efficient methods of gaining access to sites, particularly streambanks. The generally high public opinion of Conservancy partners eases this process. Potential adverse third party impacts include noise and inconvenience from the presence of heavy machinery and temporary increases in sediment loading during restoration activities.

COST

See budget table.

COST-SHARING

Contributions from volunteers, student interns, landowners, volunteer local scientific professionals, and interested public citizens are considerable in Sonoma Valley, decreasing costs of stake-holder supported watershed activites.

Sonoma Creek Watershed Conservancy - Budget

Task	Direct Labor Hours	Direct Salary & Benefits	Service Contracts	Material and Acquisition Costs	Miscellaneous and Other Direct Costs	Overhead and Indirect Costs	Total Cost
Habitat Restoration							
Task 1 Asbury Creek Fish Passage	160	$ 3,000.00		$ 14,000.00	$ 1,000.00	$ 3,632.00	$ 21,632.00
Task 2 Pool Habitat Enhancement & Restoration	2115	$ 69,830.00		$ 40,000.00	$ 4,250.00	$ 19,588.00	$ 133,668.00
Task 3 Carriger Creek Restoration	600	$ 21,000.00	$ 10,000.00	$ 20,000.00	$ 1,200.00	$ 2,100.00	$ 54,300.00
Task 4 Nathanson Creek Bank Stabilization	320	$ 11,200.00		$ 5,000.00		$ 1,120.00	$ 17,320.00
Task 5 Vineyard Demonstration Projects			$ 2,700.00	$ 68,000.00		$ 6,800.00	$ 77,500.00
subtotal							$ 304,420.00
Local Watershed Stewardship							
Task 6 Expand Stream Stewards Program	10800	$ 115,200.00	$ 7,000.00	$ 4,450.00		$ 32,070.00	$ 158,720.00
subtotal							$ 158,720.00
Environmental Education							
Task 7 Watershed Health Workshops	40	$ 2,200.00		$ 150.00		$ 478.00	$ 2,828.00
Task 8 A-A-W Watershed Education	1340	$ 39,400.00		$ 35,000.00		$ 2,940.00	$ 77,340.00
Task 9 Publish Ecological History of Sonoma Valley	125	$ 5,000.00	$ 1,000.00	$ 3,000.00		$ 1,825.00	$ 10,825.00
Task 10 Watershed Coordinator	2100	$ 82,500.00				$ 8,250.00	$ 90,750.00
subtotal							$ 181,743.00
Project Management							
Task 11 Administration	1500	$ 52,500.00				$ 5,250.00	$ 57,750.00
subtotal							$ 57,750.00
CALFED Request		$ 401,830.00	$ 20,700.00	$ 189,600.00	$ 6,450.00	$ 84,053.00	$ 702,633.00

APPLICANT QUALIFICATIONS

The Southern Sonoma County Resource Conservation District is a state chartered, local public agency and as such is an instrumentality of the United States, thus tax-exempt under section 501.C.1 of the Internal Revenue Code. The District, governed by a five member volunteer board of directors, has administered more than one million dollars in grant funding from federal, state and local sources to complete planning and implementation projects in Stemple Creek and Sonoma Creek Watersheds of Sonoma County.

Planned Organization of Staff and Other Resources

This project will be conducted by the Sonoma Creek Watershed Conservancy. The Conservancy will be managed by a Watershed Coordinator at the SSCRCD with direction from the broad-based Technical Advisory Committee formed in 1996 and the SSCRCD Board. The Watershed Coordinator will report directly to the SSCRCD Board of Directors on a monthly basis. Funding for project partners will be allocated by the project applicant, who will be held accountable for products and deliverables to CALFED. Conservancy partners meet semi-monthly to assure continuity and communication between Conservancy tasks. The Conservancy receives additional technical input from the SEC's TAC. This restoration program will dovetail with current projects and bolster current funding.

David Luther - Resource Conservationist, RCD

David will serve as Watershed Coordinator and Interim Project Manager for the Watershed Restoration Program. David is a graduate of the University of Oregon with a Bachelor of Science degree in Biology with a focus in Ecology. He is currently the Project Manager for the Petaluma River Watershed Enhancement Plan Project at SSCRCD. His recent work includes the Sonoma Creek Watershed Enhancement Plan, co-authored by Nancy Scolari.

Paul Sheffer - Engineering Technician, RCD

Paul will provide engineering and technical assistance for SSCRCD projects. Paul has over 30 years experience working with the Natural Resources Conservation Service and more than five years with SSCRCD. He is currently provides engineering services to SSCRCD and serves as North Bay Forum Project Manager. Mr. Sheffer is an accomplished poet.

Leandra Swent – District Manager, RCD

Leah is the District Manager of the Southern Sonoma County Resource Conservation District and will oversee the Watershed Restoration Program and the Watershed Coordinator. Leah will serve as financial manager. Leah oversees all district staff and projects.

Joshua N. Collins, Senior Scientist, SFEI

Josh serves as science coordinator for SFEI's Bay Area Watersheds Science Plan implementation in the Sonoma Creek Watershed. He will provide input and training for the watershed assessment with the Stream Stewards. He is an Environmental Scientist with San Francisco Estuary Institute, where he leads the programs in wetlands and watersheds.

Richard Dale, Executive Director, SEC

Richard will be projects coordinator for SEC projects. He holds a degree in Environmental Studies from UCSC and is the 1997 recipient of the John Muir Award for his national and local conservation efforts.He co-founded the SEC in 1990 and has been instrumental in its program development. The SEC runs eight programs including a six acre community farm, a regional GIS project, a science advisory group, a volunteer creek restoration program and several public education projects. It is developing habitat preservation projects including a riparian park/preserve within the city of Sonoma, and a cross-valley habitat corridor linking the valley's mountain ridges.

Angela Nardo-Morgan, Director, Sonoma Valley Watershed Station, SEC
Angela Nardo-Morgan is currently an instructor at Sonoma State University in the Environmental Studies Department. Her field is Historical Ecology and she recently was awarded a Switzer Environmental Fellowship for her research on the environmental history of Sonoma Creek Watershed. Most recently, she was awarded a Switzer Environmental Leadship Grant to direct the Sonoma Valley Watershed Station. Angela will oversee SVWS tasks and act as a liaison between the Watershed Station and other project partners.

Caitlin Cornwall, Riparian Ecologist, SEC
Caitlin Cornwall holds a BA in Biology from UC Berkeley and an MS in Botany (concentration in Ecology) from Arizona State University. Her experience spans private-sector consulting work in wetland and riparian assessment and restoration; academic research on the ecology, hydrology, and geomorphology of Western streams and riparian plant communities; and conservation biology and project management for the Sonoma Ecology Center. Her interests include monitoring and minimizing land use effects on stream and riparian ecosystems. She will be overseeing Tasks 8 and 9 as well as assisting with the restoration tasks.

Mitchell Katzel, Geomorphologist, SEC
Mitchell Katzel is a project hydrologist/geomorphologist at Entrix, Inc. with 10 years of experience in water resources planning. He has a broad range of technical expertise, including investigations and studies related to surface water hydrology, fluvial geomorphology, sediment transport and stream restoration. In addition to his technical experience, Mitchell has a thorough understanding of the environmental assessment and permitting requirements for projects subject to environmental review the National Environmental Policy Act (NEPA). He will be overseeing nad implementing the Asbury Creek task and the Pool Restoration and Enhancement Task, as well as providing technical input as a member of the SEC's TAC.

Oona McKnight, Technical Coordinator, Sonoma Valley Watershed Station, SEC
Oona McKnight received a BS in civil engineering and an MS in environmental engineering from U.C. Berkeley. She was hired as the Technical Coordinator when the Watershed Station began in 1998. For these Conservancy projects, she will develop protocols and quality assurance plans, train and educate volunteers, perform field and lab work, supervise interns, manage data, and write reports.

Chris Finlay, Executive Director, SVVGA
Chris Finlay will be projects coordinator for SVVGA projects. She has worked with SSCRCD to complete the Vineyard Demonstration projects and with the Department of Pesticide Regulation to implement an Integrated Pest Management Program in the Sonoma Valley.

Shreve LaFramenta, Executive Director, SCAAW
Shreve LaFramenta will oversee the implementation of SCAAW activities. Shreve works closely with teachers in Sonoma Valley to assure that they receive the support they need to teach localized curriculum that includes hands on activities in the living laboratory of the Sonoma Creek Watershed. In addition, he coordinates local land owners and various community groups to support the work of local teachers.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

14 April 1999

Mr. David Luther
Southern Sonoma County RCD
1301 Redwood Way, Suite 170
Petaluma, CA 94952

Subject: Sonoma Creek Conservancy (SCC) Proposal to CALFED

Dear Mr. Luther:

This letter is in support of a proposal by the SCC to the CALFED Bay-Delta program for funding of restoration-related activities in the Sonoma Creek watershed. As you are aware, since the early 1980's I have been involved in the assessment of the ecological health of stream fish and riparian communities with the San Francisco Estuary. The Sonoma Creek watershed supports several priority aquatic species as identified by CALFED including steelhead trout, California red-legged frog, and the California freshwater shrimp. In addition, the Sonoma Creek-Napa River marsh complex is utilized by delta smelt, splittail, longfin smelt, chinook salmon, clapper rail, and salt marsh harvest mouse.

Historically, Sonoma Creek and its tributaries were known internationally as a premier steelhead stream. It is likely that Sonoma Creek historically supported a larger run of steelhead than the Napa River (estimated at 6,000 adults). Sonoma Creek currently supports a run of steelhead of unknown size. Recent surveys conducted by EPA have confirmed that the Sonoma Creek watershed contains significant amounts of good to high quality steelhead spawning and rearing habitat. Furthermore, the potential to successfully restore degraded steelhead spawning and rearing habitat on Sonoma Creek and its tributaries through the implementation of various remediation and management programs is high. In addition to steelhead, the following native species occur within the Sonoma Creek watershed: pacific lamprey; resident rainbow trout; California roach; Sacramento squawfish; Sacramento sucker; prickly sculpin; riffle sculpin; and tule perch. The intact nature of native fish assemblages within the Sonoma Creek watershed is unusual and is comparable to the best remaining streams within the Central Valley in terms of the number of native fish species.

Considered together, Sonoma Creek, and the Napa and Petaluma Rivers, as well as other North Bay streams, and their associated wetlands, have the potential to play a critical role in CALFED's efforts to recover priority species and their habitats. For example, it is not unreasonable to project that with focused efforts directed at habitat restoration and management steelhead populations in the North Bay could be restored to between 3,000 and 5,000 adults (note: the Napa River historically supported 6,000 adults alone). Estimates of the average annual steelhead run size for the Sacramento-San Joaquin River system, including San Francisco Bay tributaries, range between 10,000-40,00 adults (Hallock et al. 1961, McEwan and Jackson 1996). This implies that under a reasonable "restoration" scenario, assuming that currently there are on average 30,000 adults in the Sacramento-San Joaquin River system, North Bay streams could potentially contribute to anywhere between 10% and 16% of the current total number of adult steelhead.

There are several other reasons why the North Bay could play a pivotal role in the restoration of CALFED priority species and habitats:

I-018315

There are several other reasons why the North Bay could play a pivotal role in the restoration of priority species and habitats:

(1) From a zoogeographic and ecological perspective North Bay aquatic and wetland habitats are part of the Central Valley Fish Provence. As such, the fish fauna is characteristic of the Central Valley, except that it is more diverse in terms of the number of fish species, largely due to a greater diversity of aquatic and wetland habitats. Populations of certain priority fish species (*i.e.*, splittail, delta smelt, steelhead, longfin smelt, chinook salmon, and striped bass) may or may not be isolated on a regular basis from conspecifics within other geographic areas such as the delta, Suisun marsh, or the Sacramento-San Joaquin Rivers and their tributaries (the amount and regularity of interchange among species between various geographic regions is unclear), however they do represent important "populations" from the perspective of developing an effective conservation strategy to recover declining species. Every ecologist knows that it is better not to put "all your eggs in one basket". Rather, it makes more sense to establish multiple "populations" to insure against unforseen population declines.

(2) The North Bay habitats, particularly Sonoma Creek, the Napa River, and the Petaluma marsh complex form a contiguous area with high restoration potential for priority species and their habitats. The North Bay marsh complex is both physically and ecologically linked. Therefore, restoration efforts targeted within this geographic area have the potential to result in landscape level benefits to the overall ecosystem health.

(3) Unlike Central Valley drainages, most North Bay streams are characterized by a "natural" hydrograph. With the exception of the Napa River and Novato Creek, there are no large reservoirs that store or divert flows and modify natural flow patterns. Of particular note, is the lack of large reservoirs on Sonoma Creek. Existing water diversions tend to be small, although there may be adverse localized impacts on some tributary streams. Natural flow regimes are critical to the maintenance and restoration of priority species, such as steelhead, and their associated habitats. Even on the Napa River current flow patterns closely mimic historic patterns.

(4) The close geographic proximity of North Bay drainages to each other and to the bay and ocean, facilitates the movement of fish species to meet their life history requirements. For example, distances for spawning and out migration of anadromous species for North bay streams is relatively short (25-50 miles) compared to anadromous fishes in Central Valley streams that may have to migrate 100-250 miles during up- and downstream migrations. The geographic location of North Bay habitats may improve spawning success and survivorship.

(5) Restoration and management of North Bay priority habitats on a whole benefits a greater number of priority and other fish species because of the geographic location and diversity of habitat types. For example, restoration of North Bay tidal wetlands has the potential to benefit entire assemblages of fishes (*e.g.*, splittail, longfin smelt, delta smelt, steelhead, chinook salmon, striped bass) as part of a single project.

(6) There are large areas of potential restoration areas within the North Bay and the institutional mechanisms to implement restoration are largely in place. The SEC is an excellent example of a local institution well-positioned to effectively oversee restoration activities within the Sonoma Creek watershed.

I believe that the SEC's proposal for habitat restoration combined with workshops to educate, assist and engage the community at the local level is worthy of funding. Thank you for the

opportunity to comment on this proposal. You may contact me at (415) 744-1970 if you would like to discuss my comments further.

Sincerely,

Robert A. Leidy

Robert A. Leidy
Wetland Science Program Manager

I-018317

LYNN WOOLSEY
6TH DISTRICT, CALIFORNIA

COMMITTEES:
BUDGET
EDUCATION AND THE WORKFORCE

WASHINGTON OFFICE:
439 CANNON BUILDING
WASHINGTON, DC 20515-0506
TELEPHONE: (202) 225-5161

Congress of the United States

House of Representatives

Washington, DC 20515-0506

DISTRICT OFFICES:
1101 COLLEGE AVE., SUITE 200
SANTA ROSA, CA 95404
TELEPHONE: (707) 542-7182

NORTHGATE BUILDING
1050 NORTHGATE DRIVE, SUITE 140
SAN RAFAEL, CA 94903
TELEPHONE: (415) 507-0554

E-MAIL ADDRESS:
lynn.woolsey@mail.house.gov

WEB PAGE ADDRESS:
http://www.house.gov/woolsey/

April 12, 1999

CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear CALFED Technical Review Panel:

I am writing to express my support for the Southern Sonoma County Resource Conservation District's (SSCRCD) proposal for funding from the CALFED Bay-Delta Program. SSCRCD has been working effectively in the Sonoma Creek Watershed since 1994, bringing residents together to complete a community-based watershed plan and implement vineyard demonstration projects to reduce sedimentation and improve wildlife habitat.

As I understand, funding from CALFED will allow SSCRCD to implement recommendations of the Watershed Planning Project for Sonoma Creek, which will protect the creek's sustainable steelhead run and its threatened and endangered species. Their efforts could serve as a model for a grass-roots action to improve watershed resources. This important undertaking already includes vital voluntary participation by the local agricultural community.

Thank you for your careful consideration of SSCRCD's application for funding. It is my sincere hope that SSCRCD will receive the funding it needs to continue and expand its environmental preservation efforts for the Sonoma Creek watershed.

Sincerely,

Lynn Woolsey

Lynn Woolsey
Member of Congress

LW:tf

I-018318

SWRCB

California Regional Water Quality Control Board

San Francisco Bay Region

Winston H. Hickox
Secretary for Environmental Protection

Internet Address: http://www.swrcb.ca.gov
1515 Clay Street, Suite 1400, Oakland, California 94612
Phone (510) 622-2300 • FAX (510) 622-2460

Gray Davis
Governor

April 12, 1999

CALFED Bay-Delta Program
1416 Ninth Street, Suite 1155
Sacramento, CA 95814

Dear CALFED Technical Review Panel:

I am writing to express my support for the Southern Sonoma County Resource Conservation District's (SSCRCD) proposal for funding from the CALFED Bay-Delta Program. SSCRCD has a long history of working with landowners and residents to both improve agricultural operations and protect the environment.

The Sonoma Creek Watershed Restoration Program promises to have many benefits. The watershed contains many species of concern such as the threatened steelhead trout which will benefit from the habitat enhancements envisioned in this project. The watershed has also experienced serious erosion which will be addressed to benefit water quality.

Please know that I am extremely supportive of colaborative, coordinated approaches to watershed restoration, knowing that they are the only way we can achieve positive results with private property owners and ensure that public agencies do not engage in contradictory permitting and regulatory actions. Additionally, the shared resources of public agencies, private groups and local schools ensure that watershed enhancement and public education is effectively implemented.

Thank you for your careful consideration of SSCRCD's application for funding. It is my sincere hope that your funding will allow SSCRCD to go forward to do this much needed work in the Sonoma Creek Watershed.

Sincerely yours,

William B. Hurley

Bill Hurley
Associate Water Resources Control Engineer
Regional Water Quality Control Board

I —018319

I-018319

OMB Approval No. 0348-0044

BUDGET INFORMATION - Non-Construction Programs

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Habitat Restoration		$	$	$	$	$ 702,633
2.						
3.						
4.						
5. Totals		$	$	$	$	$

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1)	(2)	(3)	(4)	Total (5)
a. Personnel	$	$	$	$	$ 401,830
b. Fringe Benefits					
c. Travel					
d. Equipment					189,600
e. Supplies					20,700
f. Contractual					
g. Construction					6450
h. Other					
i. Total Direct Charges (sum of 6a-6h)					
j. Indirect Charges					84,053
k. TOTALS (sum of 6i and 6j)	$	$	$	$	$ 702,633
7. Program Income	$	$	$	$	$

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I-018320

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e) TOTALS
8. WATERSHED CONSERVANCY	$ 10,000	$	$ 133,040	$ 143,040
9.				
10.				
11.				
12. TOTAL (sum of lines 8 - 11)	$	$	$	$ 143,040

SECTION D - FORCASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$	$	$	$	$
14. NonFederal					
15. TOTAL (sum of lines 13 and 14)	483,923	109731	109730	109731	109730

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (Years)			
	(b) First	(c) Second	(d) Third	(e) Fourth
16. WATERSHED CONSERVANCY	$ 131,855	$ 131,855	$	$
17.				
18.				
19.				
20. TOTAL (sum of lines 16-19)	$ 131,855	$ 131,855	$	$ 263,710

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:	22. Indirect Charges:
23. Remarks:	

I —0 1 8 3 2 1

I-018321

PPLICATION FOR EDERAL ASSISTANCE

OMB Approval No. 0348-0043

	2. DATE SUBMITTED: 4-15-99	Applicant Identifier:
TYPE OF SUBMISSION: Application ☐ Construction ☒ Non-Construction; Preapplication ☐ Construction ☐ Non-Construction	3. DATE RECEIVED BY STATE	State Application Identifier
	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier

APPLICANT INFORMATION

gal Name: southern sonoma county resource conservation dist

Organizational Unit: Substate, Special Purpose District

dress *(give city, county, State, and zip code)*: 1301 Redwood Way, Suite 170, Petaluma, CA 94954

Name and telephone number of person to be contacted on matters involving this application *(give area code)*: David Luther (707) 794-1242

EMPLOYER IDENTIFICATION NUMBER *(EIN)*: 94-2785937

7. TYPE OF APPLICANT: *(enter appropriate letter in box)* G

A. State; B. County; C. Municipal; D. Township; E. Interstate; F. Intermunicipal; G. Special District; H. Independent School Dist.; I. State Controlled Institution of Higher Learning; J. Private University; K. Indian Tribe; L. Individual; M. Profit Organization; N. Other (Specify) _____

TYPE OF APPLICATION: ☒ New ☐ Continuation ☐ Revision

Revision, enter appropriate letter(s) in box(es) ☐ ☐

A. Increase Award; B. Decrease Award; C. Increase Duration; D. Decrease Duration; Other *(specify)*: _____

9. NAME OF FEDERAL AGENCY:

CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 66-606

TITLE:

11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: Sonoma Creek Watershed Conservancy

AREAS AFFECTED BY PROJECT *(Cities, Counties, States, etc.)*: Sonoma County, California

PROPOSED PROJECT

14. CONGRESSIONAL DISTRICTS OF: 06

rt Date	Ending Date	a. Applicant	b. Project
10-99	10-02	SSCRCD	

ESTIMATED FUNDING:

ederal	$ 702,633.00
pplicant	$
tate	$
ocal	$
ther	$
ogram Income	$
OTAL	$ 702,633.00

16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS?

a. YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____

b. No. ☐ PROGRAM IS NOT COVERED BY E. O. 12372 ☒ OR PROGRAM HAS NOT BEEN SELECTED BY STATE FOR REVIEW

17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? ☐ Yes If "Yes," attach an explanation. ☒ No

TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE CUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.

pe Name of Authorized Representative: David Luther	b. Title: Resource Conservationist	c. Telephone Number: (707) 794-1242x3
gnature of Authorized Representative: David Luther		e. Date Signed: 4-15-99

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I -018322

I-018322

State of California
-The Resources Agency
DEPARTMENT OF WATER RESOURCES

Agreement No. _____

Exhibit _____

STANDARD CLAUSES --
SMALL BUSINESS PREFERENCE AND CONTRACTOR IDENTIFICATION NUMBER

NOTICE TO ALL BIDDERS:

Section 14835, et. seq. of the California Government Code requires that a five percent preference be given to bidders who qualify as a small business. The rules and regulations of this law, including the definition of a small business for the delivery of service, are contained in Title 2, California Code of Regulations, Section 1896, et. seq. A copy of the regulations is available upon request. Questions regarding the preference approval process should be directed to the Office of Small and Minority Business at (916) 322-5060. To claim the small business preference, you must submit a copy of your certification approval letter with your bid.

Are you claiming preference as a small business?

_____ Yes* _X_ No

*Attach a copy of your certification approval letter.

STATE OF CALIFORNIA

NONDISCRIMINATION COMPLIANCE STATEMENT

STD. 19 (REV. 3-95) FMC

COMPANY NAME: SOUTHERN SONOMA COUNTY RESOURCE CONSERVATION DISTRICT

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME: David Luther

DATE EXECUTED: 4-15-99

EXECUTED IN THE COUNTY OF: Sonoma

PROSPECTIVE CONTRACTOR'S SIGNATURE: David Luther

PROSPECTIVE CONTRACTOR'S TITLE: Resource Conservationist

PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME: Southern Sonoma County Resource Conservation District

I-018324

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9. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.

10. Will comply, if applicable, with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is $10,000 or more.

11. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).

12. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.

13. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq.).

14. Will comply with P.L. 93-348 regarding the protection of human subjects involved in research, development, and related activities supported by this award of assistance.

15. Will comply with the Laboratory Animal Welfare Act of 1966 (P.L. 89-544, as amended, 7 U.S.C. §§2131 et seq.) pertaining to the care, handling, and treatment of warm blooded animals held for research, teaching, or other activities supported by this award of assistance.

16. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.

17. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."

18. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.

SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL	TITLE
Doug Luttrell	Resource Conservationist
APPLICANT ORGANIZATION	DATE SUBMITTED
Southern Sonoma County Resource Conservation District	4-15-99

Standard Form 424B (Rev. 7-97) Back

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